

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: METALUX

Report Number: P1588307

Luminaire Tested: 24CZSP-47-L940

Issue Date: 9/3/2026

Test Information

Test Method: LM-79-2019
Report Number: P1588307
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2604-747-1)
Test Lab: INNOVATION CENTER
Issue Date: 9/3/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 24CZSP-47-L940
Description: 2x4 CZSP LED Luminaire, 4000K CCT and 4000 lumens, 90CRI, Ribbed Lens
Light Source: -
Ballast/Driver: -

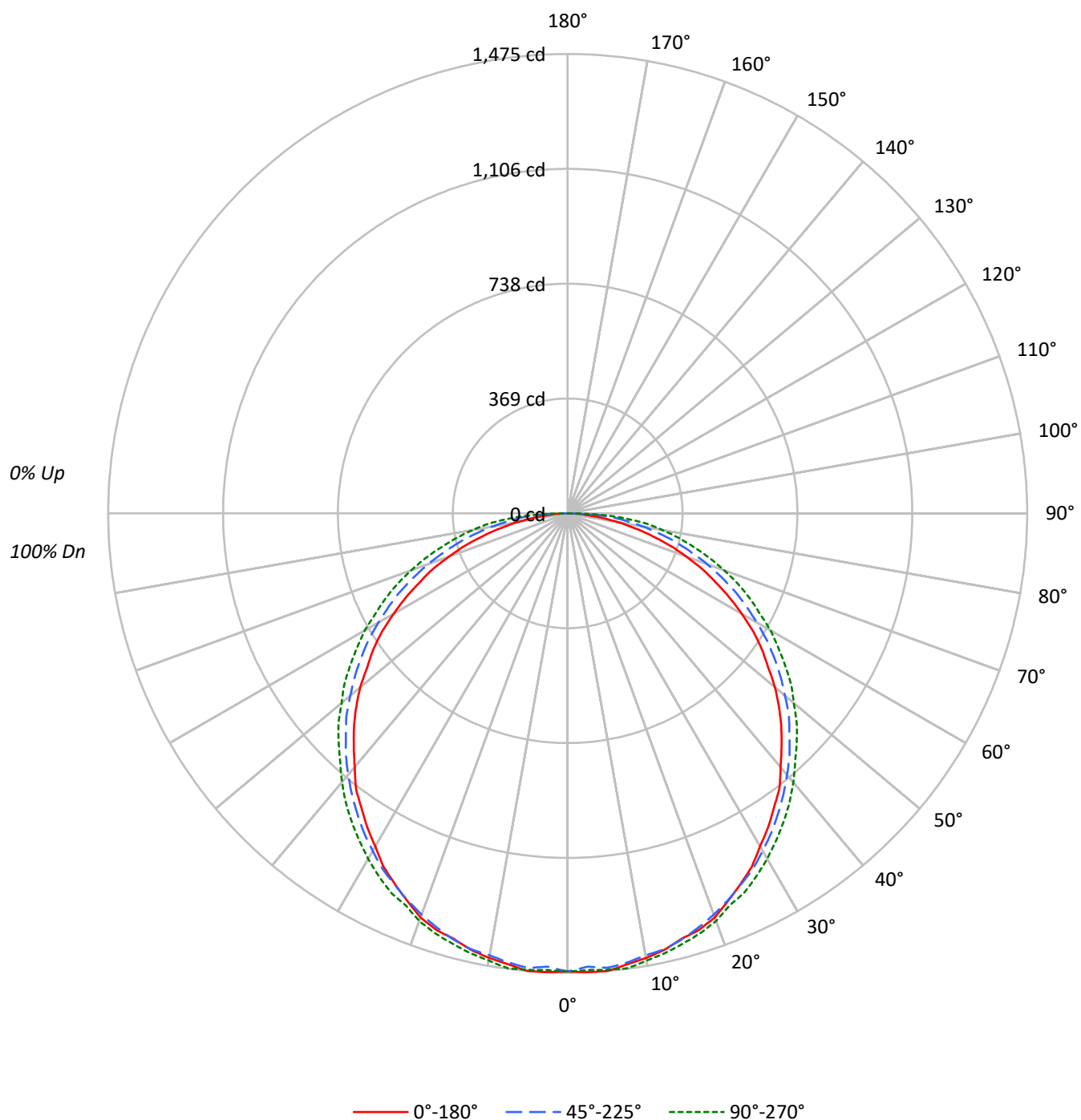
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4490.0 lumens
Efficiency: N/A
Efficacy: 139.4 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.29 / 1.39
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 32.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20			
RC	80				70				50				30				10			0
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50	30	10	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	108	103	98	94	105	100	96	92	96	93	89		92	89	87		89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73		80	75	71		77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61		70	64	60		68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	51		62	56	51		60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44		56	49	44		54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39		50	44	38		49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34		46	39	34		45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30		42	35	30		41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27		39	32	27		38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25		36	29	25		35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2253	2253	2253
5°	2268	2252	2262
10°	2254	2241	2268
15°	2242	2246	2268
20°	2250	2235	2270
25°	2219	2222	2270
30°	2183	2214	2265
35°	2157	2202	2260
40°	2126	2191	2253
45°	2101	2180	2252
50°	2070	2170	2257
55°	2033	2162	2277
60°	1976	2148	2302
65°	1898	2147	2338
70°	1811	2133	2393
75°	1667	2138	2482
80°	1461	2181	2732
85°	1114	2513	3269

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 87.5°

Luminance: 3624 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	139.7	3.1
10°-20°	401.5	8.9
20°-30°	609.9	13.6
30°-40°	738.8	16.5
40°-50°	777.3	17.3
50°-60°	722.7	16.1
60°-70°	581.9	13.0
70°-80°	376.9	8.4
80°-90°	141.4	3.1
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1151.1	25.6
0°-40°	1889.8	42.1
0°-60°	3389.8	75.5
0°-90°	4490.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4490.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1471	1471	1471	1471	1471	
5°	1475	1473	1465	1473	1471	140
15°	1414	1419	1416	1433	1430	401
25°	1313	1312	1315	1338	1343	605
35°	1154	1162	1178	1198	1209	723
45°	970	983	1006	1028	1040	748
55°	761	781	810	842	853	679
65°	524	547	592	628	645	521
75°	282	310	361	403	419	299
85°	63	94	143	178	186	78
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1471.0	1471.0	1471.0	1471.0	1471.0
2.5°	1474.3	1474.3	1457.0	1475.3	1467.8
5°	1475.3	1473.2	1464.6	1473.2	1471.0
7.5°	1460.3	1462.4	1454.9	1465.6	1473.2
10°	1449.5	1451.7	1440.9	1458.1	1458.1
12.5°	1435.5	1437.7	1433.4	1449.5	1446.3
15°	1414.0	1419.4	1416.2	1433.4	1430.2
17.5°	1402.2	1397.9	1394.7	1407.6	1414.0
20°	1380.7	1371.0	1371.0	1388.2	1392.5
22.5°	1346.3	1343.1	1344.1	1365.6	1361.3
25°	1313.0	1311.9	1315.1	1337.7	1343.1
27.5°	1279.6	1277.5	1287.1	1308.7	1313.0
30°	1234.5	1238.8	1251.7	1275.3	1280.7
32.5°	1196.8	1204.3	1216.2	1238.8	1245.2
35°	1153.8	1162.4	1177.5	1197.9	1208.6
37.5°	1116.2	1121.5	1137.7	1157.0	1169.9
40°	1063.5	1077.5	1095.7	1123.7	1126.9
42.5°	1016.2	1030.1	1053.8	1083.9	1080.7
45°	969.9	982.8	1006.5	1028.0	1039.8
47.5°	920.5	932.3	963.5	989.3	997.9
50°	868.9	883.9	910.8	937.7	947.3
52.5°	810.8	826.9	861.3	890.4	904.3
55°	761.3	780.7	809.7	842.0	852.7
57.5°	706.5	722.6	758.1	790.4	801.1
60°	645.2	664.5	701.1	735.5	751.6
62.5°	586.0	607.6	646.3	681.7	694.7
65°	523.7	547.3	592.5	628.0	645.2
67.5°	469.9	489.3	533.4	573.1	591.4
70°	404.3	430.1	476.4	520.5	534.4
72.5°	346.3	368.8	417.2	461.3	478.5
75°	281.7	309.7	361.3	403.2	419.4
77.5°	222.6	251.6	303.2	347.3	365.6
80°	165.6	193.6	247.3	292.5	309.7
82.5°	111.8	139.8	193.6	237.6	257.0
85°	63.4	93.6	143.0	178.5	186.0
87.5°	28.0	53.8	80.6	96.8	103.2
90°	0.0	0.0	0.0	0.0	0.0

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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	14.51	16.19	14.87	16.50	16.82	15.18	16.86	15.55	17.18	17.49
	3H	16.36	17.89	16.74	18.21	18.57	17.40	18.93	17.78	19.25	19.61
	4H	17.05	18.49	17.44	18.84	19.21	18.36	19.81	18.76	20.15	20.53
	6H	17.54	18.88	17.95	19.24	19.63	19.25	20.60	19.66	20.96	21.35
	8H	17.69	18.97	18.11	19.36	19.76	19.66	20.94	20.08	21.33	21.73
	12H	17.78	19.01	18.20	19.39	19.82	20.02	21.25	20.45	21.63	22.06
4H	2H	15.30	16.74	15.70	17.09	17.46	15.82	17.26	16.22	17.61	17.98
	3H	17.39	18.61	17.80	19.00	19.40	18.28	19.50	18.69	19.90	20.30
	4H	18.21	19.32	18.64	19.73	20.16	19.41	20.52	19.84	20.93	21.36
	6H	18.83	19.81	19.28	20.25	20.70	20.48	21.45	20.93	21.89	22.35
	8H	19.03	19.94	19.49	20.39	20.85	20.97	21.88	21.43	22.32	22.79
	12H	19.16	19.99	19.64	20.46	20.93	21.42	22.25	21.90	22.72	23.19
8H	4H	18.72	19.63	19.17	20.07	20.54	19.75	20.67	20.21	21.11	21.57
	6H	19.50	20.27	19.99	20.75	21.23	21.00	21.77	21.49	22.25	22.73
	8H	19.78	20.47	20.29	20.98	21.46	21.62	22.31	22.13	22.82	23.30
	12H	20.00	20.61	20.51	21.10	21.66	22.23	22.85	22.74	23.34	23.89
12H	4H	18.82	19.65	19.30	20.12	20.59	19.79	20.62	20.27	21.09	21.56
	6H	19.67	20.36	20.17	20.86	21.35	21.07	21.77	21.58	22.27	22.75
	8H	20.04	20.65	20.54	21.14	21.70	21.78	22.39	22.28	22.88	23.44